

Chicago-Kent Law Review

Volume 65
Issue 1 *Symposium on Post-Chicago Law and
Economics*

Article 14

April 1989

New Technology and the Limitations of Copyright Law: An Argument for Finding Alternatives to Copyright Legislation in an Era of Rapid Technological Change

Mary L. Mills

Follow this and additional works at: <https://scholarship.kentlaw.iit.edu/cklawreview>



Part of the [Law Commons](#)

Recommended Citation

Mary L. Mills, *New Technology and the Limitations of Copyright Law: An Argument for Finding Alternatives to Copyright Legislation in an Era of Rapid Technological Change*, 65 Chi.-Kent L. Rev. 307 (1989).

Available at: <https://scholarship.kentlaw.iit.edu/cklawreview/vol65/iss1/14>

This Notes is brought to you for free and open access by Scholarly Commons @ IIT Chicago-Kent College of Law. It has been accepted for inclusion in Chicago-Kent Law Review by an authorized editor of Scholarly Commons @ IIT Chicago-Kent College of Law. For more information, please contact jwenger@kentlaw.iit.edu, ebarney@kentlaw.iit.edu.

NEW TECHNOLOGY AND THE LIMITATIONS OF
COPYRIGHT LAW: AN ARGUMENT FOR FINDING
ALTERNATIVES TO COPYRIGHT
LEGISLATION IN AN ERA OF
RAPID TECHNOLOGICAL CHANGE

MARY L. MILLS*

Copyright is the Cinderella of the law. Her rich older sisters, Franchises and Patents, long crowded her into the chimney-corner. Suddenly the fairy godmother, invention, endowed her with mechanical and electrical devices as magical as the pumpkin coach and the mice footmen. Now she whirls through the mad mazes of the glamorous ball.¹

INTRODUCTION

Writing in 1945, when technologies such as motion-picture and radio raised concerns about copyright protection,² the great copyright scholar Zechariah Chafee could not have foreseen the dramatic changes "invention" would have on copyright law.³ However, even to those versed in current technology, innovations such as a holographic televi-

* The author would like to thank Professor J. Gordon Hylton for his advice and encouragement.

1. Chafee, *Reflections on the Law of Copyright*, 45 COLUM. L. REV. 503 (1945), quoted in Levine, *Proprietary Rights in Databases and Software*, 7 J. LIBR. ADMIN. 99 (Winter 1986).

2. *Id.* at 516.

3. Current technological developments include advances in computer software, cable and satellite television, telecommunication of visual images via "telephone" wires with optical fiber, high-definition television which is claimed to have perfect picture and perfect sound, and digital audio and video. See, e.g., Waters, *The Future of Television*, NEWSWEEK, Oct. 17, 1988, at 92 (discussing transmittal of video images through telephone lines); Davis, *Will High-Definition Be a Turn-Off?*, Wall Street J., Jan. 20, 1989, at B1, col. 3; *Making a Leap in TV Technology*, U.S. NEWS & WORLD REP., Jan. 23, 1989, at 48 (both articles address issues presented by the arrival of high-definition television); *A New Spin on Videodiscs*, NEWSWEEK, June 5, 1989, at 68 (availability of motion pictures on videodiscs, which are more interactive than videotapes and are almost indestructible: "'Even if your kid smears peanut butter on it, you just have to wipe it clean.'" *Id.* at 69.)

While computer software poses a number of pressing and cumbersome problems for copyright law, the legal issues related to this technology are beyond the scope of this Note. Because of the utilitarian nature of computer software, commentators have suggested that it should be protected by *sui generis* legislation along the lines of the Semiconductor Chip Protection Act of 1984, Pub. L. No. 98-620, tit. III, 98 Stat. 3347 (codified at 17 U.S.C. §§ 901-14 (1984)). See Samuelson, *Creating a New Kind of Intellectual Property: Applying the Lessons of Chip Law to Computer Programs*, 70 MINN. L. REV. 471 (1985). Chips have a utilitarian function—they can be used to run clocks or microwaves. This utility factor raises a number of issues outside of the realm of copyright law: "One of the central tenets of copyright law is that a copyright will not protect 'utilitarian works,' that is, works that have a usefulness beyond merely the conveying of information or the display of an appearance." *Id.* at 473.

sion system that can project three-dimensional images into your living room⁴ or an "electronic book" that will redefine reading by combining moving graphics and sound with traditional text⁵ are mind-boggling. Technology is developing rapidly, which allows not only for storing information in various forms and in new combinations, but also for new ways of transmitting data, such as the ability of a digital computer system to transmit over telephone lines voice, text and images by transforming them into a stream of computer pulses.⁶ Given the availability of these new technologies, one writer's fanciful vision of the future of "linked . . . systems . . . capable of storing faithful simulacra of the entire treasure of the accumulated knowledge and artistic production of past ages, and of taking into store new intelligence of all sorts as produced," has become a very real possibility.⁷

Today, as in 1945, the purpose of copyright law is to grant limited

4. Waters, *supra* note 3, at 84.

5. Blake, *The Electronic Book*, 6 LIBR. HI TECH 7 (1988) (describes new electronic product called The Smart Book).

Blake notes that the concept of an electronic book has been around for some time. For example, in HITCHHIKER'S GUIDE TO THE GALAXY, Douglas Adams' version of the electronic book. THE ENCYCLOPEDIA GALACTICA, used text, moving and still graphics, and sound to inform its reader/user about any subject at the touch of a button. Current technology has brought this device from science fiction to reality, and Blake believes it will eventually replace the printed book. *Id.*

See also *Dynabook's Size, Utility, Gain Attention: Portability May Open New Applications for CD-ROM*, VIDEO COMPUTING, Jan./Feb. 1989, at 3; *Touch Screen CD-ROM*, INFO. WORLD REV., Apr. 1989 at 1 (describing availability of new "electronic book" product that combines text, graphics and sound); *Desktop CD-ROM Production Now Possible*, VIDEO COMPUTING, Jan./Feb. 1989, at 1 (capacity to store various types of media on compact disc).

6. THE INFORMATION TECHNOLOGY REVOLUTION 123 (T. Forester ed. 1985). "[T]elephone companies around the world are racing to renovate their networks. Once the equipment is updated to handle everything in digital form, networks become multifunctional links that can carry anything from a simple telephone call to computerized airline reservations and television pictures." *Id.* The optical scanner is a recent innovation that converts hard text and images into digital form. Recently, hand-held scanners have appeared on the market. Van Name & Catchings, *Handy Scanners*, BYTE, June 1989, at 187. As scanners become more commonplace, the ease of copying by "digitizing" copyrighted text or graphics will have a great impact on copyright protection.

7. Kaplan, *An Unhurried View of Copyright: Proposals and Prospects*, 66 COLUM. L. REV. 831, 851 (1966).

The implications of digital technology for copyright law are truly astounding. They signify almost a complete breakdown of exclusionary barriers. See *infra* notes 15-24 and accompanying text. A recent article described one scenario in a digitized world:

[L]ooking ahead to perhaps the year 2039, you may be a historian studying communications concepts in the late 20th century. You're on your sailboat and using a battery-powered work station with a built-in cellular phone. You dial up your regional information utility and type in your request. Soon, your computer starts getting the results: the movie "Broadcast News," let's say, plus a videotaped Fujitsu annual meeting, a multicolor chart of AT&T's stock and market share, the Talking Heads' "Speaking in Tongues" album, and this article.

You take snippets from all these works (you may want to delete this particular paragraph) and work them into an hour-long presentation, with your own spoken and written commentary. Then, you press another button and send it off to your editors in Paris and Seoul.

The force that could make this scenario a reality is already swirling through one in-

exclusive intellectual property rights as incentives to authors and creators to produce and disseminate intellectual works. Two interests are served in fulfilling this purpose: (1) the copyright owners' interest in protecting and being compensated for their property rights, and (2) the public's interest in having access to the copyrighted works. In the past, copyright law struck a balance between the competing interests of owners and users with relative ease because the means of disseminating and copying intellectual works were relatively unsophisticated. However, the stakes have become higher and the competing claims more difficult to resolve when, as today, technology expands the innovative means of creating intellectual property, conveying information, and increasing public access to those creative works.⁸

One of the more recent conflicts to surface between users' and owners' rights involved the in-home use of video recorders to tape copyrighted works.⁹ This conflict culminated in two important events. The first involved a United States Supreme Court opinion, *Sony Corporation of America v. Universal City Studios*,¹⁰ which addressed the applicability of copyright law to a new technology. The second involved Congress' enactment of the Record Rental Amendment, which prohibits the commercial rental of sound recordings.¹¹ While both the Court and Con-

dustry after another. It is the conversion of all manner of words, images and sounds into computer data.

Miller, *Digital Revolution: Vast Changes Loom As Computers Digest Words, Sound, Images*, Wall St. J., June 7, 1989, at A1, col. 6.

While the fictitious scenario described above may sound like mere fantasy, much of this technology is already in place. Similar transfers of digital information, at least of text, are commonplace. In fact, portions of this Note were transmitted from one personal computer in Chicago, Illinois via an electronic communications system to a mainframe in Maryland, downloaded to a disk on yet another personal computer, and sent electronically from that computer to a facsimile (fax) machine.

8. OFFICE OF TECHNOLOGY ASSESSMENT, U.S. DEPARTMENT OF COMMERCE, INTELLECTUAL PROPERTY RIGHTS IN AN AGE OF ELECTRONICS AND INFORMATION 31 (1986) [hereinafter OTA Report].

9. *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417 (1984).

10. *Id.*

11. The Record Rental Amendment of 1984, Pub. L. No. 98-450, 98 Stat. 1727 (codified at 17 U.S.C. § 109 (1984)).

In the past five years, the volume of legislation proposed to address new technologies has increased dramatically. In the 98th Congress alone, over 50 bills dealing with intellectual property related to new technologies were introduced. A. LATMAN, *LATMAN'S THE COPYRIGHT LAW* vii (W. Patry ed. 1986). For example, the Software Copyright Act of 1980 amended Section 117 of the 1976 Copyright Act to protect computer programs. However, of the many bills proposed that dealt with home video or audio taping issues, the Record Rental Amendment was the only one enacted.

On September 26, 1988, the House passed Senate bill S. 2201 to extend the provisions of the Record Rental Amendment. 100th Cong., 2d Sess., 134 CONG. REC. S13362-05 (daily ed. Sept. 27, 1988). The most significant House amendment to the Senate bill was to extend the act for an additional eight years, rather than permanently.

Recently, a similar amendment was proposed which would restrict rental of computer software. Computer Software Rental Amendment Act of 1989, S. 198, 100th Cong., 1st Sess., 135 CONG. REC. 568 (1989).

gress have expressed concern over the inadequacy of existing copyright law to deal with new technology, neither has provided a solution. The reality of continuing technological innovations raises the question of how Congress should respond to the problem of copyright protection.

This Note will examine the difficulty Congress faces in keeping copyright law in step with changing technology. Part I will review the background of copyright law with an emphasis on the impact of technology on its development. Part II will examine the video recorder dispute in the *Sony* litigation to illustrate the various conflicts between copyright owners and users. This examination will provide the background for Part III, which will trace the history and analyze the merits of the Record Rental Amendment of 1984—the federal legislation that resulted from the *Sony* conflict. In Part IV, both legislative and non-legislative solutions to the problem of adapting copyright law to changing technology will be discussed. The Note concludes that a non-legislative market solution such as voluntary licensing provides the best answer during periods of rapid technological change.

I. BACKGROUND OF COPYRIGHT LAW

From its inception, copyright law has developed largely in response to technological change,¹² and this factor has had a greater impact on copyright law than any other.¹³ Changes in technology tend to upset the balance set by copyright law in favor of either the copyright owner, who may be able to exclude others from his work more effectively, or the user, who may make use of some technological innovation to access or exploit more easily a protected work.¹⁴ For example, the invention of the photocopier facilitated the illegal copying of an entire printed work that may have been prohibitively cumbersome, if not impossible, to copy by hand. The problem of copyright infringement becomes more acute as these innovations become available to individuals in the home—especially when the availability is widespread. A consideration of the unique characteristics of intellectual property provides for a greater understanding of the difficulty of effectively protecting intellectual property rights.

12. See COPYRIGHT, CONGRESS AND TECHNOLOGY: THE PUBLIC RECORD xi (N. Henry ed. 1978); OTA Report, *supra* note 8, at 19-20; *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417, 430 (1984).

13. A. LATMAN, *supra* note 11, at vii.

14. *Id.*

A. *The Concept of Competing Technologies*¹⁵

An owner of real or personal property can protect herself with exclusionary barriers such as fences or locks. In contrast, an owner of intellectual property cannot so easily exclude others from her work. This is particularly the case when the owner intends that the public read, view, or listen to the work. Consequently, copyright owners try to devise ways to make their products available to the public while at the same time excluding free riders (those who would appropriate the work without paying the owner a fee).¹⁶ The owner's attempt to discriminate between buyers and free riders provides the backdrop for "an unceasing 'competition of technologies.'"¹⁷ While owners tend to look for technologies that facilitate the dissemination of their products to the public and exclude free riders, users tend to seek technologies that bypass the exclusionary barriers.¹⁸

The tension between the technologies of exclusion and access also has to do with the medium which carries the intellectual product. The media used to transmit intellectual goods to the user can take on a variety of forms and properties which affect the ability to protect or use a particular good.¹⁹ For example, the text or images in a printed book are more difficult to appropriate than text or images which may be downloaded to a computer disk or copied electronically. The ability of the owner to protect her intellectual good from being easily copied allows her to be compensated for the use of that good because it will be purchased instead of appropriated by free riders.²⁰ However, once a technology which facilitates copying becomes available, the owner can lose control of the intellectual good because free riders can not only appropriate the good but can also become secondary producers of it.²¹

When the owner loses control of her property, the incentive to produce it is also lost. One solution is to develop new exclusionary technologies, but these are often cumbersome to effectuate and are soon penetrated.²² The other solution is some kind of legal protection.²³ Be-

15. The concept of competing technologies is developed fully in Adelstein & Peretz, *The Competition of Technologies in Markets for Ideas: Copyright and Fair Use in Evolutionary Perspective*, 5 INT'L REV. L. & ECON. 209 (1985).

16. *Id.* at 213.

17. *Id.*

18. *Id.* at 214.

19. *Id.* at 219.

20. *Id.* at 221.

21. *Id.*

22. During the *Sony* trial, the district court judge rejected the suggestion that Sony could manufacture the Betamax with a jamming device: "If he were to order Sony to install a jamming device, . . . some bright young entrepreneur, unconnected with Sony, is going to come up with a device to

ginning with one of the first major technological breakthroughs, the development of movable type in the fifteenth century, copyright statutes have served as substitutes for owner-created exclusionary barriers.²⁴

B. *The Development of Copyright Law*

The seminal copyright legislation, the English Statute of Anne,²⁵ was enacted in 1709 in response to the first major technological innovation: the invention of the printing press in the fifteenth century. The ability to mass-produce books resulted in a host of secondary producers, or "book pirates," who purchased books for the sole purpose of copying them and reselling the copies to consumers.²⁶ Threatened with the destruction of their livelihood, the original producers of the books, the Stationers, petitioned Parliament for relief. The resulting Statute of Anne granted exclusive property rights for a limited period of time, after which the protected works would be returned to the public domain.²⁷

The basis for copyright law in the United States is derived from the Statute of Anne,²⁸ and is found in Article I, section 8 of the Constitution. This section grants authors and inventors the exclusive right to their respective writings and discoveries "for a limited time."²⁹ There are two opposite interpretations of the purpose of copyright law: (1) that its purpose is not to reward authors, but to secure the "general benefits derived by the public from the labors of authors,"³⁰ and (2) that its purpose should be to reward copyright owners to provide incentive to produce their works.³¹ However, it is more logical to view the purpose of copy-

unjam the jam. And then we have a device to unjam the jamming of the jam, and we all end up like jelly.'" J. LARDNER, *FAST FORWARD: HOLLYWOOD, THE JAPANESE, AND THE VCR WARS* 114 (1987).

23. See W. STRONG, *THE COPYRIGHT BOOK* 1 (1981).

24. *Id.*

25. 8 Anne c. 19 (1710).

26. A. LATMAN, *supra* note 11, at 3; Adelstein & Peretz, *supra* note 15, at 224.

27. 8 Anne c. 19 (1710).

28. W. HURST, *COPYRIGHT* 6 (1977).

29. U.S. CONST. art. I, § 8, cl. 8. "The Congress shall have the Power . . . To Promote the Progress of Science and useful Arts, by securing for a limited Time to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."

This clause addresses both copyright and patent, but there is some question as to whether "science" refers to works of authors and "useful arts" to works of inventors, or vice versa. 1 NIMMER ON COPYRIGHT, sec. 1.03[a], at 1-31 n.1 (1988).

30. Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975).

31. Universal City Studios, Inc. v. Sony Corp., 659 F.2d 963, 965 (9th Cir. 1981), *rev'd* 464 U.S. 417 (1984), voicing the opposite view that the reward and incentive to copyright owners should be of primary interest, rather than the benefit to the public:

Despite what is said in some of the authorities that the author's interest in securing an economic reward for his labors is "a secondary consideration," it is clear that the real

right law as a balancing of the interests. Authors will not have the incentive to create if they are not compensated, but it would be unfair to grant them exclusive rights in their intellectual property if the public does not benefit from them in return.³²

In its first incarnation, United States copyright law protected expressions of information in printed format: books, maps and charts.³³ The process of copying these works was expensive and difficult to conceal from the owner since it involved a substantial investment in both printing equipment, such as presses and movable type, and skilled labor. Copyright owners could therefore detect and stop these types of infringements with relative ease.³⁴ However, as new technologies emerged that facilitated both the copyright owners' ability to disseminate their works and the users' ability to appropriate them, Congress expanded the copyright statute further to protect the owners' rights.³⁵ For example, in 1802 the statute was extended to protect prints and in 1865, photographs were added.³⁶ The first complete revision of the copyright laws resulted in the Copyright Act of March 4, 1909.³⁷ There were no major changes to the 1909 Act until 1976,³⁸ when the most comprehensive revision of copy-

purpose of the copyright scheme is to encourage works of the intellect, and that this purpose is to be achieved by reliance on the economic incentives granted to authors . . . by the copyright scheme. This scheme relies on the author to promote the progress of science by permitting him to control the cost of and access to his novelty. It is based on the premise that the exclusive right granted by the copyright laws "will not impose unacceptable costs to society in terms of limiting access to published works or pricing them too high."

32. President Madison's comments on intellectual property support the interpretation of the copyright clause of the Constitution as requiring a balance between the interests of intellectual property owners and the public. With reference to owners of copyrights and patents, Madison wrote "The public good fully coincides with the claims of individuals." *THE FEDERALIST* No. 43, at 272 (J. Madison) (C. Rossiter ed. 1961).

In *Mazer v. Stein*, the Supreme Court's statement of the purpose of copyright captures the notion of this balance: "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors . . ." 347 U.S. 201, 219 (1954).

33. Act of 1790, ch. 15, § 1, Stat. 124, cited in OTA Report, *supra* note 8, at 99.

34. *Id.*

35. The U.S. Copyright Act has been amended many times. It was completely revised in 1831 (protection extended to musical compositions; extension of term of protection), 1870 (protection extended to paintings, drawings, chromolithographs, statues), 1909 (protected subject matter included all writings of authors); and 1976. *Sony*, 464 U.S. 417, 460-61 (1982) (Blackmun, J. dissenting) (citing 17 U.S.C. § 102(a) (1976)).

36. A. LATMAN & R. GORMAN, COPYRIGHT FOR THE EIGHTIES 5 (1981) [hereinafter LATMAN & GORMAN].

37. 17 U.S.C.A. §§ 101-810, at vii (West 1977).

38. While not a major revision, the Sound Recording Amendment of 1971, which amended the 1909 Act to provide for a copyright in sound recordings, was significant because it responded to the problem of illegal copying of phonorecords made possible by the development—and the more widespread availability—of audio recording equipment. Pub. L. No. 92-140, 85 Stat. 391 (1971) (codified as amended at 17 U.S.C. §§ 101, 102(a)(7), 106(1), 106(3)-(4), 116, 401-02, 412, 501-04 (Supp.

right law occurred. The need for such a revision was largely due to the development of a number of technologies which made the 1909 Act obsolete, such as motion picture, radio, television, and audio and video recording equipment.³⁹ The revision process was complicated by the appearance of technologies which the pending copyright bills failed to address, and it took over twenty years for both the House of Representatives and the Senate to agree on a revised law.⁴⁰ In an attempt to address more thoroughly the problematic issues raised by new technologies, Congress created the National Commission on New Technological Uses of Copyrighted Works (CONTU) as part of the 1976 revision of the Copyright Act. CONTU's mission was to recommend ways that copyright law should be adapted to new technologies, and it was designed to focus exclusively on the two technologies current at that time, computers and photocopiers.⁴¹ In addition to computer software and photocopying, the 1976 Act included provisions for motion pictures and other audiovisual works, cable television systems, and public broadcasting of protected works.⁴² Although the 1976 Act was designed to account for a number of technological innovations affecting copyright protection, the rapid development of newer technologies—especially those that allow for widespread copying by individuals—has prompted a number of calls to Congress for still further revisions of the copyright law.⁴³

Over the years, the copyright law has been amended in response to a number of technological changes so that its purpose of balancing the rights of owners and users is fulfilled. This balance is illustrated by the juxtaposition of the two principal rights-granting sections of Title 17, sections 106 and 107. Section 106 of the Copyright Act confers a number of exclusive rights on the copyright owner, such as the right to reproduce and distribute the copyrighted work.⁴⁴ Section 107, a codification of the

IV 1980) cited in Nimmer, *Copyright Liability for Home Audio Recording: Dispelling the Betamax Myth*, 68 VA. L. REV. 1505 (1982).

39. LATMAN & GORMAN, *supra* note 36, at 7; NATIONAL COMMISSION ON NEW TECHNOLOGICAL USES OF COPYRIGHTED WORKS (CONTU), FINAL REPORT 3 (1979) [hereinafter CONTU Final Report].

40. CONTU Final Report, *supra* note 39, at 3.

41. *Id.* As a result of CONTU's recommendations, the Copyright Act was modified to treat computer programs as protected literary works and to include guidelines for photocopying, particularly by libraries.

42. A. LATMAN, *supra* note 11, at 58.

43. See *supra* note 11 (reference to the increasing volume of legislation proposed to address new technologies).

44. 17 U.S.C. § 106 (1982) reads as follows:

Exclusive rights in copyrighted works:

Subject to sections 107 through 118, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

(1) to reproduce the copyrighted work in copies or phonorecords;

judge-made doctrine of fair use,⁴⁵ describes circumstances under which normally infringing activities are permissible.⁴⁶

The fair use doctrine was reduced to law in the Copyright Act of 1976.⁴⁷ While no brightline definition of the doctrine ever emerged in the courts,⁴⁸ Congress incorporated the set of criteria that had evolved "to provide some guage [sic] for balancing the equities."⁴⁹ The four factors to be considered in determining fair use are (1) the purpose and character of the use, (2) the nature of the work, (3) the amount used in relation to the whole, and (4) the effect of the use on the potential market for the work.⁵⁰ While the bill that amended the Copyright Act to include the fair use doctrine endorsed "the purpose and general scope of the judicial doctrine . . . [there was no] disposition to freeze the doctrine in the statute, especially during a period of rapid technological change."⁵¹ Even with this disclaimer, the fact that the fair use doctrine was codified at all suggests Congress' recognition of the need to balance the interests of copyright owners with those of the public users.

Because the fair use doctrine is the greatest limitation on exclusive ownership rights, most of the conflicts which arise over whether certain

(2) to prepare derivative works based upon the copyrighted work;

(3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;

(4) in the case of literary, musical, dramatic and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly; and

(5) in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly.

45. See, e.g., *Folsom v. Marsh*, 9 F. Cas. 342 (C.C.D. Mass. 1841)(Judge Story found that there were certain "justifiable," noninfringing uses of copyrighted works); *Gray v. Russell*, 10 F. Cas. 1-35 (C.C.D. Mass. 1839).

46. 17 U.S.C. § 107 (1982) provides that:

Notwithstanding the provisions of section 106, the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright. In determining whether the use made of a work in any particular case is fair use the factors to be considered shall include—

(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;

(2) the nature of the copyrighted work;

(3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and

(4) the effect of the use upon the potential market for or value of the copyrighted work.

47. COPYRIGHT ACT OF 1976, H.R. Rep. No. 1476, 94th Cong., 2d Sess., *reprinted in* 1976 U.S. CODE, CONG. & ADMIN. NEWS 5659, 5678.

48. *Id.* at 5679. "Indeed, since the doctrine is an equitable rule of reason, no generally applicable definition is possible, and each case raising the question must be decided on its own facts." *Id.*

49. *Id.*

50. See *supra* note 46.

51. COPYRIGHT ACT OF 1976, *supra* note 47, at 5680.

uses constitute infringement center on its application. The conflicts become more difficult to resolve when they involve the additional uncertainty of new technology. The Supreme Court has addressed copyright disputes in light of new technologies on only a few occasions⁵² and has provided little guidance on the application of the fair use doctrine. In fact, the Court has been divided each time it has addressed the doctrine.⁵³ The courts' difficulty with balancing the "sharp conflict of interests"⁵⁴ of owners and users, especially in defining the parameters of the fair use doctrine as applied to a new technology, was illustrated in the *Sony* case.⁵⁵

II. TREATMENT OF THE HOME RECORDING CONFLICT IN THE COURTS

A. *Sony Corporation of America v. Universal City Studios*⁵⁶

The litigation in *Sony Corporation of America v. Universal City Studios* began in the federal district court in 1979⁵⁷ and concluded in the Supreme Court's decision in 1984. Along the way, the decision came full circle: the district court found that videocassette recorder (VCR) users had a right to record copyrighted motion pictures; the appellate court reversed, holding that the users did not have a right under the fair use doctrine to copy an entire copyrighted work; and the Supreme Court reversed again and held that the use of VCRs was protected under the fair use doctrine because the copying was not for commercial purposes.

The conflict arose when Universal City Studios and Walt Disney

52. The Supreme Court addressed the effect of technological advancements on the interpretation of the copyright law in *Fortnightly Corp. v. United Artists Television, Inc.*, 392 U.S. 390 (1968) (Copyright Act had to be read in light of major technological change where CATV could not have been contemplated at the time the act was drafted. "We must read the statutory language of 60 years ago in light of drastic technological change." *Id.* at 396); *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*, 415 U.S. 394 (1974) (Court found that while changes in commercial relationships were significant, they could not be controlled by copyright litigation based on laws enacted long before broadcast or CATV were imagined); *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 155 (1975) (when technological change renders literal terms of Copyright Act ambiguous, it must be construed in light of its basic purpose, stimulating creativity for the general public good); *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (noting, and following, courts' reluctance to expand copyright protection without legislative guidance).

53. *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417, 476 (1984) (Blackmun, J., dissenting)(citing *Williams & Wilkins Co. v. United States* 203 Ct. Cl. 74, 487 F.2d 1345 (1973), *aff'd*, 420 U.S. 376 (1975)); *Benny v. Loew's Inc.*, 239 F.2d 532 (9th Cir. 1956), *aff'd sub nom. Columbia Broadcasting System, Inc. v. Loew's Inc.*, 356 U.S. 43 (1958).

54. Chafee, *supra* note 1, at 516.

55. 464 U.S. 417 (1984); *rev'g* 659 F.2d 963 (9th Cir. 1981); *rev'g* 480 F. Supp. 429 (C.D. Cal. 1979).

56. 464 U.S. 417 (1984).

57. 480 F. Supp. 429 (C.D. Cal. 1979).

Productions brought suit against the Sony Corporation for its manufacture of the Betamax VCR. Universal and Disney argued that Sony was liable for infringement because the device was used for home recording of their copyrighted motion pictures and other works from television.⁵⁸ While the suit was against the manufacturer of the VCR for contributory infringement, one of the most important issues was whether copying by individuals in the home constituted infringement or fair use.⁵⁹ The district court noted both the "need for wide availability of audiovisual works [and] for monetary reward to authors to assure the production of these works,"⁶⁰ but ultimately found the public's interest in the accessibility of copyrighted works to be more important.⁶¹ In a complete turnaround, the Ninth Circuit Court of Appeals reversed the district court's decision unanimously.⁶² It criticized the decision below for stretching fair use beyond the dictates of the statute, noting that fair use usually applies where part of a copyrighted work is used within another work, not where the entire work is copied and used as the original was intended to be.⁶³ Where the district court decision favored the public's interest in gaining access to the copyrighted works, the court of appeal's decision

58. *Id.* at 432. Plaintiffs sought money damages and an injunction against the manufacture and marketing of the Betamax VCRs.

59. This issue is most pertinent to a discussion of the impact of new technology on copyright law because the latest technologies are more available to individual users than ever before. As this trend continues, the breakdown of copyright owners' ability to protect their intellectual property and the desire of individuals to access those works will increase.

60. 480 F. Supp. at 432.

61. In its fair use analysis, the district court found that the plaintiffs did not sufficiently show that home taping caused them harm as required in section 107(4) of the statute. *Id.* at 451. The court further held that even if home taping were an infringement, the defendants were not liable for it directly or contributorily, reasoning that VCRs were "staple articles of commerce" capable of noninfringing uses and that the defendants were not responsible for the VCR's mere potential to infringe. *Id.* at 457.

The district court case represented the first time any court found fair use where an entire work was copied and a defendant copied for entertainment and convenience as opposed to copying for purposes of research or scholarship. In contrast, *Williams & Wilkins Co. v. United States*, 203 Ct. Cl., 74, 487 F.2d 1345 (1973) *aff'd by an equally divided court*, 420 U.S. 376 (1975) (per curiam), involved the copying of an entire work for scholarly purposes. This case dealt with defendant libraries copying entire articles for interlibrary loan purposes, where the articles were not meant to be returned. In the name of scholarly research, this copying was held to be fair use. The Supreme Court split 4-4, so no opinion issued. However, Congress addressed the issue in the revision in the Copyright Act of 1976 by including the language that systematic photocopying by libraries was an infringement—but "systematic" was never defined. 17 U.S.C. § 108(g)(2) (1976).

62. *Universal City Studios v. Sony Corp. of America*, 659 F.2d 963 (9th Cir. 1981).

63. *Id.* at 970 (quoting L. SELZER, EXEMPTIONS AND FAIR USE IN COPYRIGHT 24 (1978)). The court of appeals found that the plaintiffs had demonstrated potential harm to their market because the cumulative effect of mass reproduction made possible by VCRs would diminish the potential market for their works. *Id.* at 974. It also rejected the "staple article of commerce" argument after finding that the VCR had no substantial noninfringing uses—it was used mostly to copy television programs, almost all of which were copyrighted works. *Id.* at 975.

supported the copyright owners' interest in protecting their property rights.

The pronounced disparity between the district court and the court of appeals opinions foreshadowed the five to four split in the Supreme Court's opinion.⁶⁴ While the authors of the majority and dissenting opinions agreed on very little, they both expressed reservations about providing judicial solutions to the inability of copyright law to keep pace with technology. The majority in particular expressed its concerns in a lengthy disclaimer.⁶⁵ It stated that it is Congress' responsibility to define the scope of the limited monopoly granted to copyright holders,⁶⁶ and that the judiciary has consistently deferred to Congress "when major technological innovations alter the market for copyrighted materials."⁶⁷

1. Majority Opinion

The Court reversed the court of appeals' decision, holding that video recording in the home for the purpose of private, noncommercial "timeshifting" was not infringing,⁶⁸ and that the sale of VCRs to the general public did not constitute contributory infringement.⁶⁹ In considering whether home videotaping constituted fair use, the Court focused on only two parts of the four part fair use test,⁷⁰ the purpose of the use and the harm to the copyright holder, without full discussion of the nature of the work or the amount used. The Court addressed three major issues in reaching its decision: the noncommercial use of the VCRs, the plaintiffs' failure to show the likelihood of harm to the market for their works, and the lack of specific language in the Copyright Act prohibiting the sale of VCRs or the recording of copyrighted works for later viewing.

In its analysis of the purpose of the use of the copyrighted works, the Court stated that use of the VCR to make copies for commercial or profit-making purposes would be presumptively unfair.⁷¹ The majority focused on timeshifting as the primary use of VCRs, but failed to address

64. Justice Stevens delivered the majority opinion in which he was joined by Chief Justice Burger and Justices White, Brennan and O'Connor. Justice Blackmun wrote the dissenting opinion and was joined by Justices Marshall, Powell and Rehnquist. In addition to the divided Court, this tension was reflected in the unusually large number of amicus curiae briefs filed—over thirty—on behalf of both parties. *Sony Corp. of America v. Universal City Studios*, 464 U.S. 417, 418-20 (1984).

65. *Id.* at 429-32.

66. *Id.*

67. *Id.* at 431. The Court asserted that "[s]ound policy, as well as history, supports [the Court's] consistent deference to Congress." *Id.*

68. The Court defined "timeshifting" as the practice of recording a program to view it once at a later time, and thereafter erase it. *Id.* at 423.

69. *Id.* at 456.

70. See *supra* note 46 and accompanying text.

71. 464 U.S. at 449.

the issue of "librarying"⁷² that had concerned the court of appeals.⁷³ Because the district court's findings showed that timeshifting for private home use was a noncommercial, nonprofit activity, the Supreme Court found that such use was presumptively fair.⁷⁴ The Court noted that society benefited from timeshifting because it expanded public access to the programs.⁷⁵

As to the effect of the use on the potential market for the copyrighted work, the Court acknowledged that even copying for noncommercial purposes could have a negative impact.⁷⁶ However, it modified the standard for noncommercial uses by placing the burden of proof on the *plaintiffs*⁷⁷ to show by a preponderance of the evidence that there is some meaningful likelihood of future harm.⁷⁸ Because Universal and Walt Disney failed to demonstrate such a likelihood, the Court found that the home taping of their copyrighted works was fair use.⁷⁹

Finally, the Court reversed the Ninth Circuit decision because it found no specific language in the Copyright Act that prohibited the sale of VCRs or the copying of programs for later viewing.⁸⁰ It noted in its conclusion, however, that Congress might want to provide legislation that addressed the new technology.⁸¹

2. Dissenting Opinion

Justice Blackmun, writing for the four member dissent, also called

72. "Librarying" is the practice of recording programs and keeping them in a "video library" for future viewing.

73. 659 F.2d at 974. While timeshifting involves the user's viewing at a later, more convenient time, with librarying the user actually "takes" and keeps copies of a taped program without compensating the owner.

74. 464 U.S. at 449.

75. *Id.* at 454. In concluding that timeshifting was not infringing, the Court relied in part on the testimony of Fred Rogers, owner of the copyright on the children's program *Mister Rogers' Neighborhood*. *Id.* at 445. Mr. Rogers testified that he did not object to noncommercial home taping. *Id.* However, one writer observed that Rogers' opinion and that of other non-objectors were sought when Universal was trying to stop home taping altogether, rather than get compensated for it. J. LARDNER, *supra* note 22, at 264.

76. 464 U.S. at 450.

77. Fair use is raised as an affirmative defense by the defendant, on whom the burden of proof normally rests.

78. 464 U.S. at 451.

79. *Id.* In finding that Sony was not liable for contributory infringement, the Court began its analysis by distinguishing the plaintiffs' principal case, *Kalem Co. v. Harper Bros.*, 222 U.S. 55 (1911). In *Kalem*, the defendant produced an unauthorized film dramatization of the book, *Ben Hur*. It not only provided the means to accomplish the infringing activity by making the motion picture and selling it to jobbers for distribution, it supplied the copyrighted work itself. Sony, on the other hand, did not supply VCR consumers with the plaintiffs' works, the plaintiffs did by broadcasting them on public television. *Sony*, 464 U.S. at 436.

80. *Sony*, 464 U.S. at 456.

81. *Id.*

for congressional action.⁸² However, he strongly criticized the majority's reliance on the Court's tradition of deferring to Congress when technological innovations appear,⁸³ and rejected as seriously flawed the majority's conclusion that copying of an entire copyrighted work was fair use, even for purposes of timeshifting.⁸⁴ Blackmun was critical of the majority's expansion of fair use to include copying for entertainment purposes, as opposed to "productive" uses, or " 'situations in which fair use is most commonly recognized . . . [such as] criticism, comment, news reporting, teaching, . . . [and] scholarship . . . ' " ⁸⁵ In Blackmun's view, making a video recording of a copyrighted work to be used for the same purpose as the original added no value or benefit to the public,⁸⁶ and therefore should not be exempt under the fair use doctrine. In addition to concluding that Sony was liable, Blackmun also suggested possible remedies, such as an award of damages, a continuing royalty, or a form of limited injunction.⁸⁷

B. Overview of the Sony Litigation: An Illustration of the Difficulty of Reconciling the Owner-User Conflict When a New Technology Is Involved

The district court opinion favored the interest of the public in having free access to copyrighted works.⁸⁸ The court of appeals, on the other hand, favored the interest of the copyright owners in protection of and compensation for their works.⁸⁹ Both decisions illustrate the difficulty of balancing the two interests when a new technology is involved. The Supreme Court's five to four decision further reflects the difficulty in balancing the two competing interests.⁹⁰

With the considerable interests at stake on both sides of the conflict, any position the Court might have taken was uncomfortable—reversing the Ninth Circuit decision would have seemed to be a disregard for property rights, as the four dissenting Justices apparently viewed the matter. On the other hand, enforcing the Ninth Circuit decision would have led first to the unpopular result of allowing copyright owners to prosecute

82. *Id.* at 457.

83. *Id.* "Perhaps a . . . more accurate description is that the Court has tended to evade the hard issues when they arise in the area of copyright law. I see no reason for the Court to be particularly pleased with this tradition or to continue it." *Id.*

84. *Id.* at 493.

85. *Id.* at 478 (quoting 17 U.S.C. § 107).

86. *Id.* at 480.

87. *Id.* at 499.

88. See *supra* notes 57-61 and accompanying text.

89. See *supra* notes 62-63 and accompanying text.

90. See *supra* notes 64-87 and accompanying text.

individuals for recording activities conducted in the privacy of their homes, and second to the necessity of devising a means for enforcing owner rights against an impossible number of VCR owners.

Neither the majority nor the dissent was able to support its position with a concrete solution. The majority could not go so far as to find fair use in wholesale copying, allowing instead that copying for "time-shifting" purposes was permissible with the understanding that the copy would be erased after a short period of time.⁹¹ However, the majority did not discuss how the copyright would be enforced after the period of time had passed in which the tape should have been erased. Moreover, the Court did not provide any guidance as to how long that period of time might be. While the dissent acknowledged the existence of enforceable property rights,⁹² it did not consider the means by which such rights should be enforced.

Faced with new technology (the VCR), the Court's reluctance to interpret the Copyright Act in favor of either copyright owners or users was understandable considering the uncertainty of the impact this new technology would have on access to copyrighted works. The most striking aspect of the *Sony* decision is the fact that both the majority and the dissent, divided on every other point, agreed that Congress should address the issue. When Congress finally did speak, it was in the form of the Record Rental Amendment of 1984.⁹³

III. RECORD RENTAL AMENDMENT OF 1984

Although a number of bills were proposed and major lobbying efforts exerted on both sides of the home recording issue as a result of the *Sony* litigation,⁹⁴ only a single, narrowly drafted law was enacted. The Record Rental Amendment of 1984 modifies the "first sale" doctrine of the Copyright Act. The first sale doctrine allows the owner of a copy of a work to sell or otherwise dispose of the copy without the copyright owner's consent.⁹⁵ This limitation on the copyright owner's distribution right is permitted in order to prevent the copyright owner from exercis-

91. 464 U.S. at 423.

92. *Id.* at 482-86. (Blackmun argued that a showing of potential, rather than actual, harm to the market for a copyrighted work is sufficient to establish copyright infringement, thereby favoring the protection of property over the public's access to it.)

93. Pub. L. No. 98-450, 98 Stat. 1727 (codified at 17 U.S.C. § 109 (1984))(Supp. III 1985).

94. For example, the Home Recording Rights Coalition was formed in response to the Ninth Circuit decision and proved to be a powerful lobbying group. See, *Home Recording of Copyrighted Works: Hearings on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705. Before the Subcomm. on Courts, Civil Liberties, and the Admin. of Justice of the House Comm. on the Judiciary*, 97th Cong., 2d Sess. 160 (1982) [hereinafter *Home Recording of Copyrighted Works*].

95. 17 U.S.C. § 109(a).

ing control over lawfully made copies once they have been sold. The doctrine was amended to prohibit the commercial rental, lease or lending of copyrighted phonorecords of sound recordings without the copyright owner's permission. Despite its narrow reach, the Record Rental Amendment is important because it represents a positive step by Congress in responding to technological changes that affect traditional copyright protection.⁹⁶ However, the Amendment illustrates Congress' difficulty in drafting copyright legislation that keeps pace with changing technology.

A. Legislative History

While the official legislative history of the Amendment attributes its origin to hearings in 1983,⁹⁷ the genesis of the legislation actually was the 1981 Ninth Circuit opinion in *Sony*.⁹⁸ The Ninth Circuit opinion was viewed as a victory by copyright owners who wanted protection of intellectual property rights that were threatened by technological innovations.⁹⁹ In an immediate attempt to overrule the decision, however, a number of bills were introduced in Congress to exempt home video recording from copyright infringement.¹⁰⁰ Although the home video bills were not directly related to the rental of audio recordings, the record rental legislation evolved from these bills.

This immediate Congressional response was not surprising in light of the public's negative reaction to *Sony*, reflected in editorial cartoons

96. Horowitz, *The Record Rental Amendment of 1984: A Case Study in the Effort to Adapt Copyright Law to New Technology*, 12 COLUM. J.L. & ARTS 31 (Aut. 1987).

In the hearings on the Audio and Video First Sale Doctrine, it was noted that the proposals were being considered with the underlying question: "How should the copyright law respond to technological change?" *Audio and Video First Sale Doctrine: Hearings on H.R. 1027, H.R. 1029, and S. 32 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary*, 98th Cong., 1st and 2d Sess. 523 (1983-84) [hereinafter *Audio & Video First Sale Doctrine*].

97. Record Rental Amendment of 1984, S.Rep. No. 162, 98th Cong., 2d Sess. 4, reprinted in 1984 U.S. CODE CONG. & ADMIN. NEWS 2898, 2900.

98. See *supra* notes 60-61 and accompanying text.

99. There was a feeling . . . that [the Court of Appeals] decision would serve as protection against still further technological advances that would be even more damaging—whether it was going to be the personal Xerox machine that everyone would put in his home or the use, by organizations, of transmission devices with instant printers so that a large corporation could purchase one copy of a magazine and transmit the important articles to its divisions and its subsidiaries across the country instantaneously.

J. LARDNER, *supra* note 22, at 129.

100. H.R. 4794, 97th Cong., 1st Sess., 127 CONG. REC. 24798 (1981) (one day after the court of appeals issued its decision, Representative Parris introduced this bill to counter the effect of *Sony*); H.R. 4783, 97th Cong., 1st Sess., 127 CONG. REC. 24477 (1981); H.R. 5250, 97th Cong., 1st Sess., 127 CONG. REC. 31889 (1981).

and commentaries by reference to big brotherism and video police.¹⁰¹ One proposed bill, introduced by Representative Parris, undid the Ninth Circuit's holding with one brief sentence: "[T]he fair use of a copyrighted work includes the recording and use of copyrighted works in a private home by an individual on a home videorecorder if the recordings are not used for direct or indirect commercial advantage."¹⁰² Similar bills were introduced in the House and in the Senate.¹⁰³

Those in favor of the Ninth Circuit decision likewise introduced bills to counter the proposed home recording exemption legislation. In December 1981, Senator Mathias introduced a bill that would have established compulsory licensing for video recording devices, with royalties for copyright owners to be determined by the Copyright Royalty Tribunal and paid by VCR manufacturers and distributors.¹⁰⁴ The bill was an attempt to strike "a proper balance between the viewers who tape at home and the creative artists who own the copyrights"¹⁰⁵ Nevertheless, this bill set a protectionist tone by noting that if "copyrights serve the great interest of society, failing to protect the rights created by such instruments is not excused by the fact that new technologies have made the protection of those rights more difficult."¹⁰⁶ The rationale behind making royalties applicable to manufacturers and distributors of video recording devices and media, rather than the individuals actually copying them, seemed to be an attempt to make the bill more palatable to those concerned with unhampered public access to copyrighted works and to the consuming public in general.¹⁰⁷ Representative Edwards introduced a similar bill in the House.¹⁰⁸ The hearings on this bill also reflected a concern on the part of its supporters that the bill not appear to encroach on public access.¹⁰⁹

101. See, e.g., *Smile—You're on Bootlegged Tape*, The Wash. Post, Oct. 22, 1981, at A30, col. 1, cited in *Home Recording of Copyrighted Works*, *supra* note 94, at 223-24.

102. H.R. 4794, *supra* note 100.

103. H.R. 4783, 97th Cong., 1st Sess., 127 CONG. REC. 24477 (1981) (introduced by Representative Duncan); H.R. 5250, 97th Cong., 1st Sess., 127 CONG. REC. 31889 (1981) (introduced by Representative Foley); S. 1758, 97th Cong., 1st Sess., 127 CONG. REC. 24674 (1981) (introduced by Senators DeConcini and D'Amato).

104. Amend. No. 1242 to S. 1758, 97th Cong., 1st Sess., 127 CONG. REC. 32206 (1981).

105. *Id.*

106. *Id.* at 32206-07.

107. "[W]hile [my amendment] establishes the right of the copyright owner to compensation, it does not get the people taping at home directly involved in the collection of fees. The importers and manufacturers who benefit financially from home recording will pay the royalty" *Id.* at 32206.

108. H.R. 5488, 97th Cong., 2d Sess., 128 CONG. REC. 1325 (1982). Edwards noted that he supported the basic goals of the bills proposing exemptions for home video recording, but stated that if Congress legitimized off-the-air home video recording, it "also [had] a responsibility to protect the rights of those who create and own intellectual property." *Id.*

109. "Executives of the motion picture industry . . . have persistently informed members of the

In addition, both Senator Mathias' and Representative Edwards' bills contained a clause that modified the first sale doctrine by forbidding the commercial rental, lending or lease of copies of sound recordings or motion pictures without the copyright owner's permission.¹¹⁰ The record industry lobbied successfully to expand these bills to include the same protection for audio recordings as they did for video.¹¹¹ The hearings again reflected a desire to strike a balance between owners and users.¹¹²

Despite all the legislative activity triggered by the *Sony* decision, the only law that Congress ultimately enacted prohibited the rental, lending or lease of sound recordings. Throughout all of the hearings, strong cases were made for both sides of the home recording issue. Statistical reports and testimony were presented that concluded that home taping harmed the motion picture and recording industries while other reports stated that no harm was caused.¹¹³ Why, after all the fury caused by *Sony*, did Congress draft legislation which failed to address the issue of copying audio and audiovisual works? A number of possible responses are discussed in the following section.

B. Analysis of Record Rental Legislation

One explanation for the narrow legislative solution was Congress' apparent reluctance to address the home taping issue with the Supreme

House that they do not oppose a home video exemption as long as it is linked to fair compensation. Moreover, the Ninth Circuit suggested that the solution to the VCR's illegal intercepts of television programming could be a continuing royalty." *Home Recording of Copyrighted Works*, *supra* note 94, at 47 (Statement of Jack Valenti, President, Motion Picture Assoc. of America).

110. Section 4 of Senator Mathias' bill provided that:

[S]ection 109(a) of chapter 1 of title 17 of the United States Code is amended by . . . the following: "Provided, however, That the owner of a particular phonorecord of a sound recording, copy of a motion picture or other audiovisual work lawfully made under this title may not, unless authorized by the copyright owner, dispose of the possession of that phonorecord or copy by rental, lease or lending, for purposes of direct or indirect commercial advantage."

Amend. No. 1242 to S. 1758, 97th Cong., 1st Sess., 127 CONG. REC. 32206 (1981). The modification was set forth in identical language in Section 5 of Edwards' bill. H.R. 5488, 97th Cong., 2d Sess., 128 CONG. REC. 1325 (1982).

111. Amend. No. 1333 to S. 1758, 97th Cong., 2d Sess., 128 CONG. REC. 3377 (1982); H.R. 5705, 97th Cong., 2d Sess., 128 CONG. REC. 3120 (1982). See J. LARDNER, *supra* note 22, at 210 ("Baker and Byrd approached Mathias and told him . . . that the recording industry 'didn't want to be left at the station.'")

112. "We respectfully submit that H.R. 570[5] and Amendment 1333 to S. 1758 strike a proper balance between the needs of copyright owners . . . and a public armed with a tremendous technological power within the home." *Home Recording of Copyrighted Works*, *supra* note 94, at 147 (Statement of Jack Copeland, Chairman, Copyright Comm. of the Training Media Distributors Assoc.).

113. See generally, *Home Recording of Copyrighted Works*, *supra* note 94; *Audio & Video First Sale Doctrine*, *supra* note 96; *Video and Audio Home Taping: Hearings on S. 31 and S. 175 Before the Subcomm. on Patents, Copyrights and Trademarks of the House Comm. on the Judiciary*, 98th Cong., 1st Sess. 51 (1983) [hereinafter *Video & Audio Home Taping*].

Court on the verge of deciding *Sony*. When the Court finally issued its ruling, Representative Kastenmeier,¹¹⁴ who was actively involved with the proposed home taping legislation, issued a press release in which he stated that in light of the Court's decision, he did not expect Congress to enact legislation calling for the imposition of royalties on home taping.¹¹⁵ After noting the unlikelihood of adopting legislation to provide relief for copyright owners in either royalties or prohibitive amendments, Kastenmeier qualified his statement by adding that there were other avenues that the motion picture and recording industries could pursue. He alluded to the pending proposals, found in both the Edwards and Mathias bills, to modify the first sale doctrine with regard to both audio and video rentals.¹¹⁶ The motion picture and recording industries apparently followed Kastenmeier's suggestion; their lobbying efforts focused on the modification of the first sale doctrine to prohibit audio and video rentals shortly after Kastenmeier issued the press release.¹¹⁷ Ironically, the *Sony* litigation which sparked the home recording issue in Congress ultimately caused its downfall there, as discouraged lobbyists abandoned the home copying legislation to pursue the first sale bills restricting video and audio rental.¹¹⁸

In the end, the impetus behind the video rental legislation was lost. This loss was likely caused by several factors, three of which stand out. First, the motion picture industry realized that they had a market to exploit in the rental business. Second, video rental had become an established enterprise; retailers were lobbying against measures that would destroy their livelihood, and home recording rights groups were lobbying for free access to the works.¹¹⁹ Finally, the availability of sound recordings on compact discs (CDs) turned attention from video to audio. Not only does digital sound allow for a master-like copy, the disc itself is virtually indestructible and can be used again and again.¹²⁰ So, what began as a conflict that begged a solution to the problem of home copying of motion pictures—a conflict which presented the opportunity to ad-

114. Representative Kastenmeier, Chairman of the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary, is the most active Congressman in the area of intellectual property.

115. Press release of Representative Robert Kastenmeier (Jan. 17, 1984) *quoted in* Horowitz, *supra* note 96, at 53.

116. *Id.*

117. See *Audio and Video First Sale Doctrine*, *supra* note 96, at 3843.

118. J. LARDNER, *supra* note 22, at 278-81.

119. *Audio and Video First Sale Doctrine*, *supra* note 96, at 212 (Statement of Jack Wayman, Senior Vice President, Consumer Electronics Group, Electronic Industries Association, Chairman Home Recording Rights Coalition); *Id.* at 537 (Statement of Austin O. Furst, Jr., Chairman, Vestron Video).

120. *Do CDs Rot? (Can Pigs Fly?)*, DIGITAL AUDIO & COMPACT DISC REV., Oct. 1988, at 5.

dress the broader issue of home copying in general—ended with legislation that addressed only the rental of sound recordings, the Record Rental Amendment.

The problem with the Record Rental Amendment's narrow scope is manifested in two significant ways. First, it failed to address directly the issue of unauthorized reproduction, the type of copyright infringement that it was originally proposed to resolve. Second, this failure quickly resulted in a call for Congress to enact legislation that did confront the issue of home copying, as it attempted to do with the proposed Digital Audio Recorder Act of 1987.¹²¹

1. The Failure of the Record Rental Amendment to Address Directly the Home Recording Problem

In focusing solely on the problem of unauthorized distribution, the Record Rental Amendment failed to address the underlying and more pressing problem of unauthorized reproduction of copyrighted works. Even Melville B. Nimmer, the foremost authority on copyright law, characterized the importance of an exclusive distribution right—in this case, the exclusive right to rent copyrighted works—as a protection from infringing reproduction.¹²² According to Nimmer, the right of exclusive distribution should not be viewed as the only ground for a cause of action against the infringing reproducer, but as a practical means for the prosecuting copyright owner to go after the distributor where the infringing reproducer may be unavailable.¹²³ The Record Rental Amendment seems to preclude a cause of action based on unauthorized reproduction, leaving unauthorized distribution as the only avenue of relief for the copyright owner.

The Record Rental Amendment provided a solution for the problem of copying facilitated by record rental, but not for the broader problem of unauthorized home recording in general. Directing the Record Rental Amendment to rental operators as opposed to those individuals actually doing the copying was an easy way for Congress to avoid facing the home taping problem. This approach was particularly odd considering several congressmen had stated that the real issue was home recording, not rental.¹²⁴

Another indication that the issue of home taping was sidestepped

121. S. 506, 100th Cong., 1st Sess. (1987) and H.R. 1384, 100th Cong., 1st Sess. (1987).

122. 2 NIMMER ON COPYRIGHT, § 8.12[A] at 8-120.8 (1988).

123. *Id.*

124. "Of course, the real problem from the music or recording industry's view, as everyone concedes, is *not* rentals as such, but rather the antecedent, separate and wider phenomenon of home

was reflected in testimony supporting H.R. 1029.¹²⁵ This testimony indicated that the purpose behind the original proposal for legislation was not specifically to stop rentals but to ensure that copyright owners were compensated for the reproduction of their works.¹²⁶ After noting that the VCR allowed for repeated performances through video rentals that otherwise would have been purchased, one witness testifying on behalf of the creators of copyrighted works stated that his group was not interested in stopping or limiting video rental, but in receiving reasonable compensation for the use of their works.¹²⁷ In avoiding the issue of unauthorized reproduction, the record rental legislation also failed to address the question of how or whether copyright owners should be compensated for the widespread home reproduction of their works.

The Copyright Office foresaw the problems created by Congress' dodging of the home recording issue. In urging that Congress act rather than wait for the Supreme Court's *Sony* decision, the Copyright Office stated that there would be difficulty in drafting an appropriate decree, making it impossible to bind all parties concerned if the Supreme Court affirmed the Ninth Circuit decision.¹²⁸ On the other hand, if the Ninth Circuit decision were reversed, the issue would remain whether Congress should modify that decision by imposing a levy system as proposed in Senate Bill 31.¹²⁹ The Court's ultimate reversal did leave open the question of whether a royalty or some type of compensation system should be

audio taping." *Audio and Video First Sale Doctrine*, *supra* note 96, at 313-14 (Statement of David Lange, Professor of Law, Duke University).

There are a number of instances in the First Sale hearings where taping, not rental, was identified as the true problem:

I still feel that . . . a case has not been made that [rental itself] is a serious problem. I am open to considering the copying as being a serious problem. But it seems to me that that may best be addressed, if it's deemed advisable to address it, through some kind of initial charge on the sale of blank tapes and/or equipment. I just find it hard to differentiate between the rental of a tuxedo, if you will, . . . and the rental of a tape. The only difference I can see is that one can be easily copied where the others cannot. If some kind of satisfactory thing could be fashioned on the copying, it doesn't seem to me that the rental is, in itself, a problem that ought to be attracted [sic].

Id. at 155 (Comment of Subcomm. Member Harold S. Sawyer).

"I'm not really sure that record rental is the problem. I think the problem is home taping." *Id.* at 165. (Comment of Chairman Kastenmeier).

"What we will have is two small outlets closed [if rental outlets are prohibited], but you still will have massive home taping. . . . will you not? And home taping is apparently the root of the problem." *Id.* at 335 (Comment of Chairman Kastenmeier).

125. *Id.* at 686.

126. *Id.*

127. (Testimony of Jack Golodner, Director, Department for Professional Employees, AFL-CIO).

128. *Video & Audio Home Taping*, *supra* note 113, at 51 (Statement of David Ladd, Register of Copyrights, Library of Congress).

129. *Id.*

imposed, but Congress never answered that question in the record rental legislation.

The Record Rental Amendment has been heralded as an example of Congress' ability to act swiftly in protecting intellectual property from the threat of new technological advances.¹³⁰ If the existing copyright law did not adequately protect the rights of copyright owners, then the amendment is indeed laudable. However, Congress evaded the problem of unauthorized reproduction and thereby undermined the validity of the amendment. In not confronting the real issue, the Record Rental Amendment gives rise to a strained interpretation of copyright law. It is an example of the judiciary's and legislature's inability to resolve the conflict between owners and users when a new technology upsets the balance between their competing interests.

2. The Digital Audio Recorder Act

The inadequacy of addressing the home recording problem with a narrowly drafted revision of the copyright law became apparent when the need for legislation which did address the issue arose as soon as a new technology appeared. This new technology, the digital audio tape machine (DAT), makes recordings that are far superior in quality to conventional analog tape recordings.¹³¹ As the availability of DAT threatened a new means of copyright infringement, Congress responded to copyright owners' call for relief with the proposed Digital Audio Recorder Act of 1987 (DARA).¹³² DARA did not go further than the hearing stage, but it is important because it reflects the need for copyright provisions that address new technologies. DARA was a trade related bill rather than a proposed copyright amendment, but it still would

130. Horowitz, *supra* note 96. The Record Rental Amendment was enacted less than two years after it was proposed. This was remarkably swift considering that it took more than twenty years for Congress to agree on the revised 1976 Copyright Act, and that proposed copyright bills often get lost in the battle between competing interest groups. See, e.g., *id.* at 68; *infra* note 140 and accompanying text.

131. See, e.g., *Stevie Wonder Opposes S. 506 and H.R. 1384, the Digital Audio Recorder Act of 1987*, 133 CONG. REC. 2429 (daily ed., June 16, 1987) (statement of Stevland Morris (Steve Wonder)).

Analog recordings require a range of frequencies that can be distorted, while digital recordings—whether sound, text, or image—require a series of on-off computer pulses that create a signal which is so close to that of the original work that the quality is near that of the original. See, Comment, *Disc, DAT and Fair Use: Time to Reconsider?*, 25 CAL. W.L. REV. 97 n. 2 (1988); THE INFORMATION TECHNOLOGY REVOLUTION, *supra* note 6.

132. Digital Audio Recorder Act of 1987, S. 506 100th Cong., 1st Sess. (1987) and H.R. 1384, 100th Cong., 1st Sess. (1987). See also, H.R. 1155, 100th Cong., 1st Sess. (1987) and S. 539, 100th Cong., 1st Sess. (1987) (like the proposed Digital Audio Recording Act, these bills also dealt with potential copyright infringement by prohibiting digital audio recorders lacking copy-code scanners).

have had a great impact on copyright protection.¹³³ The act proposed a technical solution to protect intellectual property: it banned the manufacture or importation of any digital audio recording device that did not have a copy-code scanner.¹³⁴ The scanner would disable the recording function of a digital audio recorder after being triggered by a signal encoded in a digital audio tape recording, thereby preventing illegal copying. Once again, the issue of home copying resurfaced—and it was, not surprisingly, outside the realm of the recently enacted record rental legislation.

While DARA confronted the problem more directly than the Record Rental Amendment, it still suffered from a narrow scope because it addressed only copying by a digital audio recorder. With the advent of new technologies with similar copying abilities,¹³⁵ the Act raised concerns that, like the record rental legislation, its narrow scope would leave other works unprotected. Furthermore, the copy-code scanner required by DARA would stop *all* copying, denying access to those who had a legitimate reason to copy. The result would have been an imbalance on the side of copyright protection. In addition, as noted above, technical solutions are not usually favored because they often fail or are soon overcome by another technology.¹³⁶ Legislation like the Record Rental

133. See, *Copyright Issues Presented by Digital Audio Tape, Hearings on S. 506 Before the Subcomm. on Courts, Civil Liberties and the Administration of Justice of the House Comm. on the Judiciary*, 100th Cong., 2d Sess. 2 (1987).

134. 1987-88 *Legislative Review and Outlook*, 35 PAT. TRADEMARK & COPYRIGHT J. (BNA) 285 (Feb. 11, 1988). A "copy-code scanner chip"—to be built into audio recorders, would disable the record function of the machine when it receives an encoded signal on the recording.

Even though DARA did not go beyond the hearings stage, the copyright issues presented by DAT remained unresolved. Recently, the record industry and the manufacturers and distributors of DAT machines reached an agreement to allow the sale of the recorders in the United States. The agreement was viewed as a defeat for the record industry because there was no provision for a royalty scheme or any other arrangement to compensate or protect the copyright owners. The only concession granted by the manufacturers was a recommendation to Congress that legislation similar to DARA be enacted that required technical limitations on the machines. One explanation for the record industry's acquiescence in the battle over DAT was the fact that Sony, who developed the DAT technology, acquired CBS Records, one of the major opponents of DAT. Goldberg, *Labels Back Down on DAT*, ROLLING STONE, Sept. 21, 1989, at 26.

135. See, e.g., Sherrod, *Pirating Issue in Fast-forward*, Chicago Tribune, June 6, 1989, § 3, at 2, col. 2 (agreement between copyright owners, Motion Pictures Association of America, and producers of dual-deck VCR to manufacture the VCR with anti-copying device similar to copy-code scanner proposed in DARA).

136. See *supra* note 22 and accompanying text. The results of a study on the use of copy-code scanners in digital audio recorders suggested that it was not likely to be a successful means of protection. *Copyrights, DAT*, 35 PAT. TRADEMARK & COPYRIGHT J. (BNA) 351 (March 3, 1988). The National Bureau of Standards (NBS) concluded:

[T]hat the encoding system which the recording industry wants installed on digital audio tapes (DAT) machines only prevents copying half the time, affects the quality of encoded recordings, and could be easily bypassed.

On March 1st, NBS released the results of its study on DAT machines which was requested by both House and Senate committees in response to pending legislation . . .

Amendment and the Digital Audio Recorder Act is too narrow when one considers that disc technology has made available products which contain video, audio, and textual information.¹³⁷ The problem of unauthorized home copying will continue to resurface because it has never adequately been resolved nor specifically addressed.

IV. LEGISLATIVELY IMPOSED COMPULSORY LICENSING VS. A MARKET SOLUTION

The failure of the Digital Audio Recorder Act, along with the narrowly drafted Record Rental Amendment, illustrates the difficulty in drafting legislation that both protects the copyright owner and provides access to intellectual property in the face of new technological innovations. Given the inability of the courts and Congress to provide adequate solutions, is the state of technology such that the conflict between copyright owners and users is becoming irreconcilable?

A. *Compulsory Licensing and Market Solutions*

In an insightful lecture delivered over a decade ago, Barbara Ringer, then Register of Copyrights,¹³⁸ discussed compulsory licensing as a possible solution when technology advances to the level where it becomes impossible to balance owners' and users' rights.¹³⁹ The steps Ringer outlined in her lecture on the process of adapting copyright law to new technology seemed to be a script for the legislation that emerged at the end of the home recording controversy:

The copy-prevention system does not achieve its stated purpose, according to John Lyons of the NBS National Engineering Laboratory. The problems with the system, he added, probably cannot be ironed out.

Id. For a more detailed critique of the digital audio legislation, see Comment, *supra* note 131.

137. General Electric currently produces a video display technology called Digital Video Interactive (DVI) which mixes text and motion pictures on compact disks. DVI promises to out-perform the existing Compact Disk-Interactive technology. See *Intel Buys DVI Video Technology from GE*, INFO. INDUSTRY BULL., 1, 7, vol. 4, no. 40. (Oct. 20, 1988).

One recent innovation makes these technologies portable, increasing the accessibility and use of works. *A Revolutionary Way to View Your Data: The Private Eye*, LASERDISK PROFESSIONAL, Sept. 1988, at 12. "Private Eye is a breakthrough in display technology. It is a miniaturized display that is only 1" high by 1.2" deep by 3.2" wide. When you hold it up to your eye and look into it, what you see appears to be a full-size monitor about two feet from your eyes It lets you provide full-screen capabilities in a very portable package." *Id.* It would also have a certain amount of RAM to store downloaded material and will eventually work with a portable CD player very much like a Walkman. *Id.* at 13-14.

See also *supra* notes 5-7 (discussion of possibility of not only storing, but transmitting digital sound, text, and images).

138. Barbara Ringer was the United States Register of Copyrights in 1976.

139. Ringer, *Copyright in the 1980s*, 23 BULL. COPYRIGHT SOC'Y 299 (1976).

Compulsory licenses provide for the right to use a copyrighted work if certain procedures are followed and a statutorily defined fee is paid. D. JOHNSTON, COPYRIGHT HANDBOOK 115 (1978).

- First you have a copyright law that was written at a particular point in the development of communications technology, and without much foresight.
- Then you have technological developments, which create whole new areas for the creation and use of copyrighted works.
- Business investments are made and industries begin to develop.
- The law is ambiguous in allocating rights and liabilities, so no one pays royalties.
- A point is reached where the courts simply stop expanding the copyright law and say that only Congress can solve the problem by legislation.
- You go to Congress, but you find that you have hundreds of special interest groups lobbying for or against the expansion of rights, and the legislative task is horrendous.¹⁴⁰

The *Sony* conflict, which arose years later, followed these steps exactly: 1) the development of the VCR allowed for the creation and use of copyrighted works on video; 2) large investments were made in the development of the VCR and video rental industries, and they quickly grew; 3) because the technology was available and works could be easily copied, and the law was ambiguous as to whether they could be copied or not, VCR owners reproduced copyrighted works without compensating the owners; 4) the courts' response to the owner/user conflict was to defer to Congress; 5) Congress was barraged with a number of groups lobbying for both users' and owners' rights, which perhaps explains the limited nature of the legislation it finally enacted.

Ringer concluded her outline with a discussion of compulsory licensing as a solution in cases where conflicts over equally legitimate interests are apparently incapable of resolution.¹⁴¹ Compulsory licensing systems require payment for use of a work based on a fee fixed by some agency. The Copyright Act provides for governmentally imposed licensing schemes. The Copyright Office, in conjunction with the Copyright Royalty Tribunal,¹⁴² administers the establishment and distribution of royalties under statutorily imposed compulsory licensing schemes for cable transmissions, the manufacture and distribution of phonorecords, and the performance of nondramatic musical works on jukeboxes.¹⁴³ For example, cable television system owners obtain compulsory licenses by paying part of their gross receipts to the Copyright Register, whereupon the monies are deposited in a general account. The Copyright Roy-

140. Ringer, *supra* note 139, at 306.

141. *Id.* at 139-40.

142. 17 U.S.C. § 801 (1982). The Copyright Royalty Tribunal was established under the Copyright Act of 1976. *Id.*

143. See 17 U.S.C. §§ 111(d), 115, 116(b) (1982) (compulsory licensing provisions for cable transmissions, non-dramatic musical works, and jukeboxes).

alty Tribunal then distributes the royalties to copyright owners who file claims with the Tribunal.¹⁴⁴

Noting that compulsory licensing schemes seem to be fair to each side (the owner is compensated and the user has free access to the work), Ringer stated that compulsory licensing may be the only solution when new technology makes exclusive rights under copyright law impossible.¹⁴⁵ Other commentators have also noted that licensing systems will become necessary as problems of enforcement are exacerbated by developing technologies.¹⁴⁶ For example, compulsory licensing has been suggested as a solution to the problem of home audio taping. Elaborating on language in the Ninth Circuit *Sony* opinion,¹⁴⁷ Nimmer advocated the use of a royalty system as a judicial remedy in cases of infringing home copying of audio works.¹⁴⁸ He envisioned plaintiff copyright owners licensing defendant manufacturers of audio recording equipment to continue production of the infringing equipment in exchange for a percentage of the manufacturers' sales.¹⁴⁹ Nimmer also considered the likelihood that manufacturers would shift the cost of the royalty to the consumer, justifying this action: "because the consumer is the primary infringer, there is no reason why he should not ultimately pay for the privilege of recording copyrighted works."¹⁵⁰

A licensing scheme seems to be an attractive solution to the home recording conflict. Under such a scheme, home recording would be tolerated and at the same time owners would receive some compensation where they otherwise would receive none. In recalling the irreconcilable differences over which owners and users fought for years in the *Sony* litigation and in the legislature, a licensing scheme appears to strike a workable balance. As discussed earlier,¹⁵¹ Senator Mathias proposed a compulsory licensing solution in the context of the *Sony* conflict, but that

144. 17 U.S.C. § 111 (1982).

145. Ringer, *supra* note 139, at 306-7.

146. Braunstein, Fischer, Ordovery, & Baumol, *Economics of Property Rights as Applied to Computer Software and Databases*, in TECHNOLOGY AND COPYRIGHT 245 (Bush and Dreyfuss eds. 1979) [hereinafter Braunstein].

147. See *Sony*, 659 F.2d at 976. (In fact, the language to which Nimmer refers, in which the Ninth Circuit suggests awarding continuing payment of royalties rather than grant injunction, is the court's citing of Nimmer himself.)

148. Nimmer, *Copyright Liability for Audio Home Recording: Dispelling the Betamax Myth*, 68 VA. L. REV. 1505, 1530 (1982).

A recent comment proposed a licensing scheme as a solution to the home audio copying problem as exacerbated by the availability of digital audio tape. Comment, *supra* note 131.

149. Nimmer, *supra* note 148, at 1533.

150. *Id.* at 1531.

151. See *supra* notes 104-09 and accompanying text.

proposal was left behind as lobbyists pursued the rental legislation.¹⁵² Like Ringer, Mathias concluded that a compulsory licensing scheme seemed to be the most equitable solution where new technology makes it difficult to balance owners' and users' rights.¹⁵³ His proposal would have created a legislatively imposed licensing scheme that would direct the Copyright Royalty Tribunal to set fees based on the sale of recording devices and recording media such as blank tapes.¹⁵⁴ Individuals would be able to copy television programs without worrying about copyright liability, and copyright owners would be compensated.¹⁵⁵ Manufacturers and importers of recording equipment and media would pay the royalty, thereby avoiding the problem of collecting compensation from individuals.¹⁵⁶ While the manufacturers would likely pass along to consumers the cost of the royalty, those individuals who purchased a number of tapes to build libraries of recorded programs would absorb more of the cost than those who purchased one tape and used it repeatedly for non-infringing purposes.¹⁵⁷ Given the rapid changes in technology and the difficulties that have continued to resurface since *Sony*, perhaps a licensing scheme should be considered once again.

Compulsory licensing systems have their own set of problems, of course. In allowing a centralized external agency to set fees and determine royalties, the copyright owner loses much control of her work.¹⁵⁸ This loss of control is not as unattractive under a private licensing arrangement where the owner maintains some control, but is unacceptable where the government becomes heavily involved. Ringer, for example, worried about the prospect of the Copyright Office taking on too much of a regulatory role if it became involved in a licensing scheme. She expressed concern about "government control over the conditions of authorship,"¹⁵⁹ because it invited intrusive state oversight of creative endeavors and threatened the loss of individuality of authors and works.¹⁶⁰ For this reason, and because such regulation tends to sweep too broadly, governmentally imposed compulsory licensing seems to be

152. See *supra* note 118 and accompanying text.

153. See *supra* note 104, at 32207. "The very ingenuity of our age that has produced these remarkable technologies should be able to devise the laws to accommodate them."

154. See *supra* notes 104-09 and accompanying text.

155. Amend. No. 1242, *supra* note 104, at 32206.

156. *Id.*

157. *Id.*

158. Braunstein, *supra* note 146, at 243 (noting net loss to copyright holder).

159. Ringer, *supra* note 139, at 310.

160. *Id.* at 303, 309.

an appropriate solution only in extreme instances.¹⁶¹ While the widespread availability of home recording devices may constitute such an extreme instance, a solution that invites centralized governmental control over intellectual property may be going too far. In fact, compulsory licensing has been criticized for opening the door to governmental intrusion where the marketplace has been successful in working out its own problems.¹⁶²

A market solution—wherein private entrepreneurs rather than government employees address problems of copyright infringement¹⁶³—avoids the possibility of governmental intrusion and has enough merit to warrant consideration. For example, a marketplace option can accommodate technological change with no government intervention. Another advantage of a market solution is the greater capacity of the marketplace to keep pace with rapid technological change, a major downfall of copyright law. Also the needs of both owners and users are better met, as in the case of privately negotiated contracts.¹⁶⁴

While a thorough study of the market of intellectual goods is beyond the scope of this Note,¹⁶⁵ a look at one of the latest advancements in video and audio technology suggests that a market solution is possible. Until very recently, one of the most pressing issues left unresolved after *Sony* was how to cope with the new compact disc and digital technologies, which facilitate the unauthorized reproduction of master-like copies.¹⁶⁶ While this issue still poses problems for copyright owners, a recently developed technique for encoding motion pictures on compact disc may soon provide a market solution that dispels fears of copyright

161. See Gordon, *Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600, 1613 (1982).

"In extreme instances, Congress may correct for market distortions by imposing a regulatory solution such as a compulsory licensing scheme But the broad brush of this regulatory solution is too sweeping for most cases." *Id.* The example Gordon used to illustrate such an extreme involved the threat of monopolistic control over the manufacture of mechanical recordings such as piano rolls. Congress dealt with the problem by providing that anyone could make or sell recordings of copyrighted works as long as he paid the copyright owner a statutorily determined fee. *Id.* (citing Studies prepared for the Subcomm. on Patents, Trademarks and Copyrights of the Senate Comm. on the Judiciary, 86th Cong., 1st Sess., *The Compulsory License Provisions of the U.S. Copyright Law* (Study No. 5) 11 (Comm. Print 1960) (H. Henn)).

162. *Home Recording of Copyrighted Works*, *supra* note 94, at 285 (Statement of George Atkinson, President, The Video Station, Inc.).

163. OTA Report, *supra* note 8, at 89.

164. *Id.*

165. For an overview of economic theory as applied to intellectual property law, see McCain, *Information as Property and as a Public Good: Perspectives from the Economic Theory of Property Rights*, 1988 LIBR. Q. 265.

166. See, e.g., Fleischmann, *Impact of Digital Technology on Copyright Law*, J. PAT. OFF. SOC'Y. 5 (1988).

infringement.¹⁶⁷ The technique will make these "paperback movies," like paperback books, so inexpensive to produce and distribute that there would be no economic advantage to making illegal copies of them.¹⁶⁸ That this product has been developed without any compulsory licensing or additional copyright protection supports the idea that tolerance of some infringing free-riders may be a cost of doing business for copyright owners who wish to tap new technological media.¹⁶⁹ In the case of the "paperback movie" product, the technology and market changed so rapidly that it apparently provided its own solution to the problem of infringement.

On the other hand, the adequacy of the marketplace to work out these problems has been questioned.¹⁷⁰ Clearly, if the marketplace alone provided an adequate solution there would never have been a need for any statutory protection such as the copyright law.¹⁷¹ But as one writer describes it, there is a market in copyrighted goods: copyright law allows a consensual market to function by creating property rights, lowering transaction costs, and providing valuable information and mechanisms for enforcement.¹⁷² However, copyright markets do not always perform adequately.¹⁷³ While copyright law allows for consensual transfers, when the bargaining becomes prohibitive or enforcement against free-riders becomes impractical, or when other market flaws arise, desirable consensual exchanges may be unattainable: in those cases, the market cannot be relied on to balance owners' and users' interests.¹⁷⁴ The availability of a new technology can be a source of market flaws. The market poses a greater risk to intellectual property owners when a new technology is involved because often the transaction costs are high and, especially where the product is accessible by individual home users, the expected profits are low.¹⁷⁵

Given the lack of certainty and potential pitfalls in the marketplace,

167. Karraker, *Media Lab Puts Movies on CDs*, VIDEO COMPUTING, Nov.-Dec. 1988, at 6. The product was developed by MIT's Media Lab. While still in its early stages, "[t]he project may someday lead to the transmission of encoded video directly to homes in a matter of minutes over standard telephone wires." *Id.*

168. *Id.*

169. The conflict over reproduction of copyrighted works is paralleled in the area of photocopying. "A certain minimum level of 'background noise' in the form of small-scale infringements (perhaps quite numerous) may have to be tolerated as a cost of doing business." Gleason, *Publishers' and Librarians' Views on Copyright and Photocopying*, 20 SCHOLARLY PUB. 13, 21 (1988).

170. For a thorough critique of marketplace solutions, see Gordon, *supra* note 161.

171. See *supra* notes 22-24 and accompanying text.

172. Gordon, *supra* note 161, at 1612-13.

173. *Id.* at 1613.

174. *Id.*

175. *Id.* at 1628.

a legislatively imposed compulsory licensing scheme begins to look attractive once again. But in weighing the two evils, an omnipresent government or an unpredictable market, relying on a market solution seems far preferable—especially where the legislature is unable to provide an adequate solution.

B. A Compromise: the Use of Private Agencies to Administer Compensation Schemes for Copyrighted Works

When technological development reaches a level where there seems to be no adequate response other than a legislatively imposed compulsory licensing system on the one extreme or a market solution on the other, perhaps a compromise between the two extremes is most appropriate.¹⁷⁶ Rather than a congressionally imposed compulsory licensing system, voluntary licensing should be encouraged. Under a voluntary system, copyright owners could negotiate their own royalty scheme. Where the license was arranged between private parties, copyright owners would maintain control over their property and receive the desired compensation. Users would benefit by gaining access to the works without having to wonder whether they were infringing on the copyright because the owner would have consented to their use. The only external involvement would be that of the courts to enforce the contract between the owner and the manufacturer or distributor.¹⁷⁷

One criticism of voluntary licensing schemes is that negotiating royalty arrangements with every user, distributor or owner of a copyrighted work (or with manufacturers of recording equipment) would be overly burdensome for all parties to the contract.¹⁷⁸ An alternative would be the use of a private agency, such as the American Society of Composers, Authors and Publishers (ASCAP) or Broadcast Music, Inc. (BMI),¹⁷⁹ to

176. A voluntary licensing solution is far from novel, particularly where a new technology threatens the balance of copyright law. See Nimmer, *supra* note 148, at 1534. Nimmer discusses the use of a voluntary licensing approach as a judicial remedy in conflicts between plaintiff copyright owners and defendant infringers whereby the two parties would negotiate a royalty which the court would then enforce. *Id.* at 1533. This Note suggests that voluntary licensing arrangements should be encouraged between owners of copyrighted works and distributors or users before infringement occurs.

A recent comment on the digital audio recorder legislation proposed a similar solution. Comment, *supra* note 131.

177. Nimmer, *supra* note 148.

178. See, e.g., Chafee, *supra* note 1, at 528-29 (hypothesizing about the dilemma of a hotel which tries to arrange licenses for each recorded work it rebroadcasts: "Besides getting an ASCAP license, must the hotel bargain separately with every independent composer on the chance that his music may come through to the hotel patrons?").

179. For a history of ASCAP and BMI, see Note, *CBS v. ASCAP: Blanket Licensing and the Unresolved Conflict between Copyright and Antitrust Law*, 13 CONN. L. REV. 465, 470-76 (1981).

administer licensing of works and distribution of royalties.¹⁸⁰ ASCAP and BMI are private performing rights societies which sell blanket licenses for the use of copyrighted works, remitting a portion of the licensing fees to the copyright owners.¹⁸¹ In exchange for the administrative services of the agency, the owner gives up some control over her work, but still maintains at least a say in the use of the work. Here, the owner *chooses* to contract with the private organization, as opposed to having royalties and terms of protection set by the Copyright Royalty Tribunal or some other government agency. Placing the administration of licensing fees in the hands of a private organization would eliminate the regulatory role of the government, thereby reducing the risk of extensive state control of intellectual property.¹⁸² The existence of such private organizations may not stop unauthorized copying by individuals but, in providing a systematic and centralized means of disseminating copyrighted works, they do provide a natural "bottleneck" where copyright owners can collect compensation.¹⁸³ Also, if a copyright owner chose not to register with a private agency, other market alternatives, such as private contracts and technical solutions, would still be viable options for protection.¹⁸⁴

Voluntary licensing can be considered a "compromise" between

180. Nimmer advocated a blanket licensing approach and the use of a private organization. Nimmer, *supra* note 148, at 1532.

181. One of the most obvious difficulties posed by a licensing scheme is establishing a means of calculating and dispersing fees to copyright owners. Nimmer noted this complication in his proposal of a licensing scheme for sound recording devices, but also stated that such problems are "by no means insuperable." *Id.* at 1532.

If technology makes possible Kaplan's vision "linked systems" of all past and future copyrighted works, perhaps even licensing schemes will become impractical. Kaplan, *supra* note 7. For example, in the case of a single product that makes available digitized text, sound and images—each representing different copyrighted works—a licensing scheme could be difficult to administer. In considering the impact of digital technology on copyright protection, some writers have suggested alternatives to licensing schemes. For example, information could be priced as a raw commodity or publishers could charge for the organization or arrangement, modification and update of their works instead of charging by the copy. Miller, *Digital Revolution*, Wall St. J., *supra* note 7, at A4. A private agency such as ASCAP could facilitate this type of arrangement administratively by serving as a "broker" or clearinghouse of copyrighted works.

182. See *supra* note 159 and accompanying text.

183. I. DE SOLA POOL, TECHNOLOGIES OF FREEDOM 216 (1983). De Sola Pool discussed this "bottleneck" effect in reference to a case where the defendant, the Board of Cooperative Educational Services (BOCES) of Erie County, New York, was videotaping programs off the air for use in schools without the copyright owner's permission. *Encyclopedia Britannica Educ. Corp. v. Crooks*, 558 F. Supp. 1247 (W.D.N.Y. 1983). While BOCES could be stopped, nothing could prevent individual teachers and students from copying the programs—as they would be more likely to do without access to the works through BOCES. Closing down BOCES resulted in the destruction of an organization from which the copyright owners could collect compensation for use of their works.

184. For example, the development of a dual-deck VCR raised great concerns about copyright protection because of its capacity for duplicating copyrighted works not only off the air but from rented videotapes. The manufacturers won the blessings of copyright owners (the Motion Pictures Association of America) to produce and market the VCR when they signed an agreement requiring

governmentally administered compulsory licensing and a pure market approach, but it clearly represents a market solution that involves a quasi-legislative entity. Voluntary licensing involves no modification of or amendment to the Copyright Act. Although the courts and lobbyists for both copyright owners and users have strenuously lobbied Congress to adapt the copyright law to changing technology, perhaps no legislative action is the best solution where the conflicting interests are so great that Congress seems unable to solve the problem.

The Copyright Act creates a delicate balance¹⁸⁵ between the interests of copyright owners and users. A shift in this balance, prompted by legislative action, may pose a greater threat to the interests of both owners and users than the problem purportedly being resolved. This theory applies not only to additional legislation that would govern new technologies, but also to the repeal of existing sections of the Copyright Act. Abolishing the fair use doctrine¹⁸⁶ (which has been recommended by at least two commentators)¹⁸⁷ as a solution for dealing with copyright infringements made possible by new technologies would be premature. The fair use doctrine contributes to the balance in copyright law and should not be discarded.¹⁸⁸ Denying fair use rights would shift the balance of copyright law in favor of copyright owners. Again, legislative action would threaten the balance of rights in copyright law rather than enhance it.

V. CONCLUSION

As technology develops more rapidly than ever, copyright owners and users will continue to press for revisions of the Copyright Act. The Record Rental Amendment is an example of a legislative response to the battle between copyright owners and users that resulted from the availability of a new recording technology. The Amendment also illustrates, along with the court cases that led up to its enactment, the difficulty of resolving such conflicts. Instead of narrowly drafted, piecemeal legislation like the Record Rental Amendment or the Digital Audio Recorder

the inclusion of a device which picks up a signal to prevent movies from being copied. Sherrod, *supra* note 135.

This anti-copying device is similar to the copy-code scanner proposed for digital audio recorders. See *supra* note 136. However, in this case the device would be included under a private agreement rather than by government decree.

185. See *supra* note 32 and accompanying text (discussion of balance in copyright law).

186. 17 U.S.C. § 107 (1982).

187. See Adelstein & Peretz, *supra* note 15; Fleischmann, *supra* note 166, at 25.

188. For example, the motion pictures encoded on compact disc that will be so inexpensive to produce could be used for educational or scholarly purposes that would cause no economic harm to the copyright holder. See *supra* notes 167-68 and accompanying text.

Act, a market solution such as voluntary licensing is the best answer. Otherwise copyright law will become saddled with provisions that will not only become obsolete but will ultimately upset the balance between the rights of owners and users.

